

**What is claimed is:**

1. A pharmaceutical composition comprising a safe and effective amount of human liver regeneration associated protein hLRTM4, and a pharmaceutically acceptable vehicle, diluent or carrier.
- 5 2. The composition of claim 1, wherein the hLRTM4 protein has the amino acid sequence as shown in SEQ ID NO:2
3. The composition of claim 1, wherein the safe and effective amount of hLRTM4 is 1 $\mu$ g - 5 mg/kg body weight per day.
- 10 4. A use of liver regeneration associated protein hLRTM4 in the preparation of a drug used for treating liver injury.
5. The use of claim 4, wherein the drug is used to treat acute or chronic hepatitis, liver cirrhosis, or liver pathological changes caused by liver cancer.
- 15 6. A pharmaceutical composition comprising a safe and effective amount of antagonists of hLRTM4 protein, wherein the antagonists are selected from the group consisting of: (i) an antisense polynucleotide to hLRTM4 , wherein the polynucleotide has the antisense nucleotide sequence as shown in SEQ ID NO : 1 and has a length of 15-625bp, (ii)small interfering double-strand RNAs of hLRTM4, wherein the RNAs have the nucleotide sequence as shown in SEQ ID NO :1 and have a length of 17-23bp and a 20 3'-terminal dtdt sequence; and/or (iii) a specific antibody against hLRTM4, as well as a pharmaceutically acceptable vehicle, diluent or carrier.
7. The composition of claim 6, wherein the polynucleotides has the full-length antisense sequence to SEQ ID NO:1.
- 25 8. The composition of claim 6, wherein the safe and effective amount of antagonist to hLRTM4 is 1ug - 5mg/kg body weight per day.
9. A use of hLRTM4 protein antagonist for the preparation of a drug for treating hepatocellular carcinoma, wherein the antagonist is selected from: (i) an antisense polynucleotide to hLRTM4, wherein the polynucleotide has the nucleotide sequence as shown in SEQ ID NO : 1 and has a length of 15-625 bp; (ii) a small interfering 30 double-strand RNA of hLRTM4, wherein the RNA has the nucleotide sequence as shown in SEQ ID NO :1 and has a length of 17-23 bp and a 3'-terminal dtdt sequence; and/or (iii) a specific antibody against hLRTM4.
10. The use of claim 9, wherein the antagonist is an antisense polynucleotide to hLRTM4, wherein the polynucleotide has the nucleotide sequence as shown in SEQ ID NO : 35 1 and has a length of 15-625 bp.